

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF MODELING, MONITORING SYSTEMS
AND QUALITY ASSURANCE (RD-680)
Modeling and Monitoring Systems Staff
Washington, DC 20460

FACSIMILE TRANSMISSION COVER SHEET

TO <i>Beth Brown</i>	
ADDRESS <i>Region 4</i>	
FACSIMILE TELEPHONE NUMBER <i>8 257 1695</i>	OFFICE TELEPHONE NUMBER <i>257 7791</i>
FROM <i>Dean Neptune</i>	
ADDRESS <i>QAMS</i>	
OFFICE TELEPHONE NUMBER <i>8-260 9464</i>	MAIL CODE
DATE <i>12/16/91</i>	NUMBER OF PAGES TO INCLUDE THIS COVER SHEET <i>2</i>
TELEPHONE NUMBER OF MMSS FACSIMILE MACHINE	<i>260-4346 (FTS or Area Code 202)</i>
TELEPHONE NUMBER FOR VERIFICATION	<i>260-5776 (FTS or Area Code 202)</i>
SPECIAL INSTRUCTIONS <i>Please call me ^{FTS} 260-9464 After you get a chance to review the attached note. Thanks Happy Holidays Dean</i>	



10663344

Note To: Beth Brown

12/15/91

From: Dean Neptune

Subject: Development of Data Quality Objectives for a Ground Water
Data Collection Survey--Collierville, TN

Bet you thought that I had forgotten about my promise to drop you a line about a possible extension on the planning of statistical designs such as we have been doing with soil contamination problems to ground water problems.

What I would like to propose is that we take a site, like Collierville, TN (Carrier) where we know that a spill of compound like TCE occurred. The current site historical information suggests that this is a site where we believe that all the sources of TCE are known and the hydrogeological action in this subsurface environment can be described using the historical data base or data that may be collected through a pilot at a modest cost. I would like to attempt to facilitate an environmental data collection planning discussions among the Region 4 site oversight person (probably Beth Brown), the PRP administrative/technical boss, and the PRPs' contractor. During these discussions, I would like the group to develop the outputs for each step of the Data Quality Objectives Process.

Assuming agreement can be reached between Region 4 and the PRP for these outputs, I will take them and turn them into a pilot survey, if that is necessary, to fill statistical survey design data gaps (distribution of contaminant(s) such as normal or log-normal, etc.). If the DQO outputs, contaminant variability and distribution, and agreement from the site decision makers is reached, I will then turn these into a set of statistical based design alternatives using the above inputs and then a set of practical sample collection plans that can be implemented. If there is no statistical design that will meet the specifications that Region 4 and the PRP have agreed upon, I will make suggestions as to how the DQOs and other specifications could be modified causing the least impact on the site goals.

The PRP, of course, will have to implement and cover the cost of sample collection and analysis for the pilot (if a pilot is necessary) and for the site remedial investigation. QAMS will also assist with data interpretation and data analysis (we may be able to use less expensive analytical methods as the contaminants are few). The goal here is to demonstrate that a statistically based planning approach may also be used for subsurface contamination problems, thus enhancing the current use of best professional judgement of the hydrogeologist by adding the use of statistical tools. I recognize that a PRP may be concerned about the cost implications of trying something different and I suggest that we all agree, upfront, on the budget for this portion of the site.

As you probably are aware, QAMS is suffering from no travel budget for FY92 9 (This is no exaggeration). I will use my contractors, the phone and limited meetings in Washington and Atlanta to try to overcome this problem. I would like for us to explore this approach with the PRP in the very near future, please call me, FTS 260-9464. I will be going to Birmingham, Al for the Holidays 27-28 December and could arrange for a brief stop to meet.

When you're done
not allowing one sample to determine quitting point
defend work
saving \$ @ all sites; no guarantees
on alot.

R7 diox in site 30 Acres cost of remediation 5.9 million
of original \$13 - Actual cleanup

Carolina Transformer RI/FS - quick turnaround
\$9600 for sampling for 55 samples
\$120 v. \$300

5 Acres X, Y, Z @ end of RI/FS.

cost of ourselves and HQ
their costs are the same.

Total Quality Effort
opportunity for them to participate and enhance
Chances for their costs + less
anytime after 3 today.

W → until 10:30, after 3

Th - unavailable

F - available

12/27 2pm

Randy Randall Riti, Montana State University
7 years, assisting in implementation
understands Superfund & are both statisticians
cooperative agreement

Statistical issue
quantitative decision making

* Survey designs RI/FS
surface soil

RELEASEABLE

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5/2/06